

Message

From: Lin, James [lin.james@epa.gov]
Sent: 9/11/2019 4:06:04 PM
To: Blankinship, Amy [Blankinship.Amy@epa.gov]; Wente, Stephen [Wente.Stephen@epa.gov]; Arnold, Elyssa [Arnold.Elyssa@epa.gov]
Subject: RE: aldicarb GW numbers

I will wait for Steve to comment.

I just report the PCAs with orchard involved (i.e., orchard, orchard and turf, orchard and vegetables).

Looking at the current uses, veg/orchard may be good, since there is no aldicarb turf use.

However, cotton is allowed and there is no cotton-orchard PCA.

Thanks much.

Jim

Use	Max. Single App. Rate (lbs a.i./A)	Max. Annual App. Rate (lbs a.i./A)	Min. App. Interval (d)	App. Method	Labeled Use States
Cotton	1.05 (At Planting) 0.75 (Side Dress) 2.1 (Side Dress)*	1.8 3.15*	21	at-plant: in furrow and T-band post-emergent: in furrow	U.S. *[CA only]
Dry Beans	2.1	2.1	0	at-plant: in furrow	CO, ID, MI, OR, WA only
Peanuts	1.05 (At Planting) 1.5 (Post-Emergence)	2.55	14	at-plant: in furrow, incorporated band or T-band post-emergent: banded over foliage	U.S. [Split application only in AL, FL, GA, NC, OK, TX, VA]
Soybeans	1.05	1.05	0	at-plant: in furrow or T-band	GA, NC, SC, VA only
Sugar Beets	4.95 (At Planting) 3.0 (Post-Emergence) 4.05 (Post-Emergence) 2.1 (At Planting)* 2.1 (Side Dress)*	4.95 4.2*	14	at-plant: in furrow, incorporated band or T-band post-emergent: in furrow, incorporated side band or side dress	[CO, ID, MT, NE, OR, WA, WY only] *[CA only]
Sweet Potatoes	3.0	3.0	0	pre-plant or at-plant: band covered by hilling	LA, MS only

From: Blankinship, Amy <Blankinship.Amy@epa.gov>
Sent: Wednesday, September 11, 2019 11:53 AM
To: Lin, James <lin.james@epa.gov>; Wente, Stephen <Wente.Stephen@epa.gov>; Arnold, Elyssa <Arnold.Elyssa@epa.gov>
Subject: RE: aldicarb GW numbers

Thanks Jim. Question -

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If I read the use table correctly,

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Thanks,
Amy

From: Lin, James <lin.james@epa.gov>

Sent: Wednesday, September 11, 2019 8:31 AM

To: Blankinship, Amy <Blankinship.Amy@epa.gov>; Wentte, Stephen <Wentte.Stephen@epa.gov>; Arnold, Elyssa <Arnold.Elyssa@epa.gov>

Subject: RE: aldicarb GW numbers

Please see attached EDWC results cover both SW and GW.
Thanks much.

From: Blankinship, Amy <Blankinship.Amy@epa.gov>

Sent: Wednesday, September 11, 2019 7:25 AM

To: Lin, James <lin.james@epa.gov>; Wentte, Stephen <Wentte.Stephen@epa.gov>; Arnold, Elyssa <Arnold.Elyssa@epa.gov>

Subject: RE: aldicarb GW numbers

Hi,

For this preliminary needs for HED, the map below is likely enough. We would need to make sure Kurt has time and approval to make the map for us. I can talk to Lee and ask if his group can help out.

Thanks everyone for taking the time to pull this information together.

Amy

From: Lin, James <lin.james@epa.gov>

Sent: Wednesday, September 11, 2019 7:23 AM

To: Wentte, Stephen <Wentte.Stephen@epa.gov>; Blankinship, Amy <Blankinship.Amy@epa.gov>; Arnold, Elyssa <Arnold.Elyssa@epa.gov>

Subject: RE: aldicarb GW numbers

Thanks much, Steve, for this pH information.
Please ask Kurt to get a Florida pH map for us.

Jim

From: Wentte, Stephen <Wentte.Stephen@epa.gov>

Sent: Wednesday, September 11, 2019 7:20 AM

To: Lin, James <lin.james@epa.gov>; Blankinship, Amy <Blankinship.Amy@epa.gov>; Arnold, Elyssa <Arnold.Elyssa@epa.gov>

Subject: RE: aldicarb GW numbers

Here is a groundwater pH map for the continental US. (If you want to present groundwater numbers by pH it might help to have a map, since there is a range across Florida.) Attached is the raw data, so if anyone has GIS on their computer (I got Kurt Pluntke to make this map for me), they could create a map that focuses in on Florida. I will be in training and presenting at the PFTTT at 2pm (be there or be square). Would people want a map? I can talk to Kurt? Note that Jerrett



could do it, but he is in training with me.

From: Lin, James <lin.james@epa.gov>

Sent: Tuesday, September 10, 2019 9:39 AM

To: Blankinship, Amy <Blankinship.Amy@epa.gov>; Wentte, Stephen <Wentte.Stephen@epa.gov>; Arnold, Elyssa <Arnold.Elyssa@epa.gov>

Subject: RE: aldicarb GW numbers

Hi, All:

Please comment on this draft, so it is good to HED.

Thanks much.

Jim

From: Blankinship, Amy <Blankinship.Amy@epa.gov>

Sent: Tuesday, September 10, 2019 9:23 AM

To: Lin, James <lin.james@epa.gov>; Wentte, Stephen <Wentte.Stephen@epa.gov>; Arnold, Elyssa <Arnold.Elyssa@epa.gov>

Subject: RE: aldicarb GW numbers

Hi Jim,

Thanks for these numbers. Would you mind putting all this information (what you have in the email string below) into a Word document so we can forward to HED?

Thanks,
Amy

From: Lin, James <lin.james@epa.gov>

Sent: Thursday, September 05, 2019 2:33 PM

To: Wente, Stephen <Wente.Stephen@epa.gov>; Blankinship, Amy <Blankinship.Amy@epa.gov>; Arnold, Elyssa <Arnold.Elyssa@epa.gov>

Subject: RE: aldicarb GW numbers

Previous DWA (098301_427697_DWA_06-17-15.doc) show the use table as below:

Use	Max. Single App. Rate (lbs a.i./A)	Max. Annual App. Rate (lbs a.i./A)	Min. App. Interval (d)	App. Method	Labeled Use States
Cotton ^C	1.05 (At Planting) 0.75 (Side Dress) 2.1 (Side Dress)*	1.8 ^A 3.15* ^A	21	at-plant: in furrow and T- band post-emergent: in furrow	U.S. *[CA only]
Dry Beans	2.1	2.1 ^A	0	at-plant: in furrow	CO, ID, MI, OR, WA only
Peanuts ^B	1.05 (At Planting) 1.5 (Post-Emergence)	2.55 ^A	14	at-plant: in furrow, incorporated band or T- band post-emergent: banded over foliage	U.S. [Split application only in AL, FL, GA, NC, OK, TX, VA]
Soybeans	1.05	1.05 ^A	0	at-plant: in furrow or T- band	GA, NC, SC, VA only
Sugar Beets ^D	4.95 (At Planting) 3.0 (Post-Emergence) 4.05 (Post-Emergence) 2.1 (At Planting)* 2.1 (Side Dress)*	4.95 ^A 4.2* ^A	14	at-plant: in furrow, incorporated band or T- band post-emergent: in furrow, incorporated side band or side dress	[CO, ID, MT, NE, OR, WA, WY only] *[CA only]
Sweet Potatoes ^E	3.0	3.0 ^A	0	pre-plant or at-plant: band covered by hilling	LA, MS only

The highest EDWCs are based on the sugar beets use –

Sugar Beets	MN sugar beets	Apr. 15	4.05 (Post Emergence)
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For the new **Deliberative Process / Ex. 5**

Deliberative Process / Ex. 5

Modeled Scenario	Ground-water pH	Max. Daily Conc. (µg/L)
	7	33
	8	1.25

At pH 6, the k value (degradation rate in aquifer) is 0.00456/day based on the hydrolysis half-life of 152 days. The effects of well setback at different distances are as follows:

Well Setback (ft)	1 ft/day Ground-water Velocity	0.5 ft/day Ground-water Velocity	0.1 ft/day Ground-water Velocity
	Max. Daily Conc. (µg/L)		
50	79.61	63.38	10.23
300	25.46	6.48	1.14E-4
500	10.23	1.046	1.25E-8
700	4.11	0.169	Not calculated
1000	1.05	Not calculated	Not calculated

At pH 7, the k value is 0.011/day based on the hydrolysis half-life of 63 days. The effects of well setback at different distances are as follows:

Well Setback (ft)	1 ft/day Ground-water Velocity	0.5 ft/day Ground-water Velocity	0.1 ft/day Ground-water Velocity
	Max. Daily Conc. (µg/L)		
50	19.04	10.98	0.134
100		3.65	
150		1.22	
175		0.70	
200		0.40	
300	1.22	0.045	1.53E-13
500	0.13	Not calculated	Not calculated
700	1.5E-2	Not calculated	Not calculated
1000	5.5E-4	Not calculated	Not calculated

At pH 8, the k value is 0.1155/day based on the hydrolysis half-life of 6 days. The effects of well setback at different distances are as follows:

Well Setback (ft)	1 ft/day Ground-water Velocity	0.5 ft/day Ground-water Velocity	0.1 ft/day Ground-water Velocity
	Max. Daily Conc. (µg/L)		
50	3.9E-3	1.20E-5	1.03E-25
300	1.1E-11	Not calculated	Not calculated
500	1.0E-25	Not calculated	Not calculated
700	9.5E-36	Not calculated	Not calculated
1000	8.4E-51	Not calculated	Not calculated

From: Wentte, Stephen <Wentte.Stephen@epa.gov>

Sent: Thursday, September 05, 2019 2:02 PM

To: Blankinship, Amy <Blankinship.Amy@epa.gov>

Cc: Lin, James <lin.james@epa.gov>

Subject: RE: aldicarb GW numbers

I think everything you said is fine for assessing citrus. However, with the highest aldicarb EDWCs, so I am confused on what the other uses are that we need to consider. I realize that we are focused on the new use, but it seems like we still need to consider other uses too. With all the recent changes in aldicarb use, it may be difficult to know EDWC to actually recommend at the end of the day.

Deliberative Process / Ex. 5

From: Blankinship, Amy <Blankinship.Amy@epa.gov>

Sent: Thursday, September 05, 2019 1:47 PM

To: Wentte, Stephen <Wentte.Stephen@epa.gov>

Subject: RE: aldicarb GW numbers

I know we discussed you doing it, but since he started the conversation, I thought I would just answer him so he knew where I stood on it. Please add or correct anything I've said in the email below.

From: Wentte, Stephen <Wentte.Stephen@epa.gov>

Sent: Thursday, September 05, 2019 1:46 PM

To: Blankinship, Amy <Blankinship.Amy@epa.gov>

Subject: RE: aldicarb GW numbers

Thanks for sending.

From: Blankinship, Amy <Blankinship.Amy@epa.gov>

Sent: Thursday, September 05, 2019 11:55 AM

To: Lin, James <lin.james@epa.gov>; Arnold, Elyssa <Arnold.Elyssa@epa.gov>

Cc: Wentte, Stephen <Wentte.Stephen@epa.gov>

Subject: RE: aldicarb GW numbers

Hi Jim,

Yes, I agree that we should (300 and 1000 ft?). Also, what distance is needed to be below the current DWLOC of 0.87?

Deliberative Process / Ex. 5

Also, I think we should explore the PCA concept. Just need to make sure we are considering the right uses and standard approach from EFED.

I don't want to get too deep in the weeds yet and explore other additional refinements characterizations. Let's run the numbers and see where we are and can share them with HED and the team. I'm interested in what the usage and PCT discussions bear.

Thanks,
Amy

From: Lin, James <lin.james@epa.gov>

Sent: Thursday, September 05, 2019 10:23 AM

To: Arnold, Elyssa <Arnold.Elyssa@epa.gov>; Blankinship, Amy <Blankinship.Amy@epa.gov>

Cc: Wentte, Stephen <Wentte.Stephen@epa.gov>

Subject: RE: aldicarb GW numbers

I did **Deliberative Process / Ex. 5** should be explored.

From: Arnold, Elyssa <Arnold.Elyssa@epa.gov>

Sent: Thursday, September 05, 2019 10:21 AM

To: Blankinship, Amy <Blankinship.Amy@epa.gov>

Cc: Lin, James <lin.james@epa.gov>; Wente, Stephen <Wente.Stephen@epa.gov>

Subject: aldicarb GW numbers

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Elyssa Arnold, Risk Assessment Process Leader
Environmental Risk Branch 2
Environmental Fate & Effects Division
Office of Pesticide Programs
U.S. Environmental Protection Agency
(703) 347-0236
arnold.elyssa@epa.gov